

2024 national curriculum tests

# Key stage 1

## Mathematics

### Paper 2: reasoning

First name	
Middle name	
Last name	

Total marks	
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**Ajay**



**Amy**



**Ben**



**Kemi**

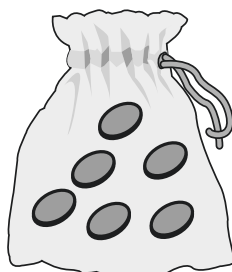
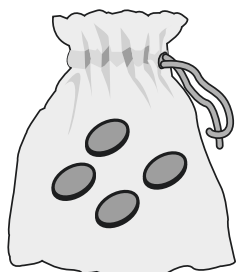
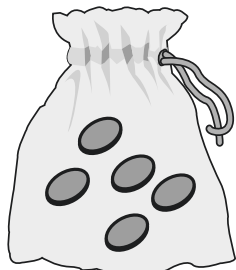


**Sam**



**Sita**

## Practice question



1

38

--

tens



1 mark

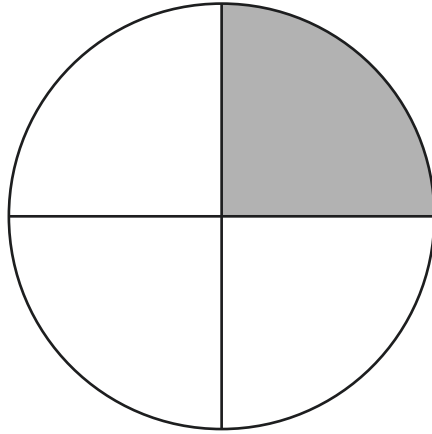
2

August						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



1 mark

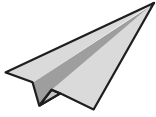
3



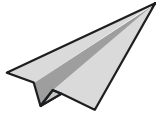
A vertical rectangle with a horizontal line drawn across its middle, intended for the student to write the fraction  $\frac{1}{4}$ .

  
1 mark

4



Sam  
**3** metres



Amy  
**8** metres

metres



1 mark

5

2

4

5

6

7

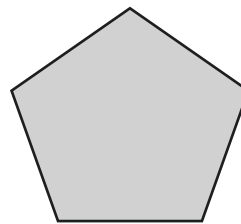
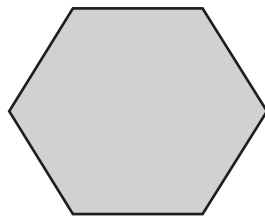
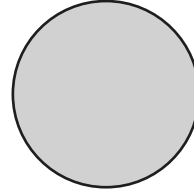
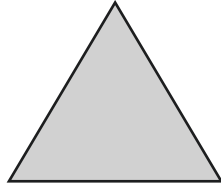


1 mark

6

Kemi draws around a face of a **cylinder**.

Tick the shape she has drawn.



1 mark



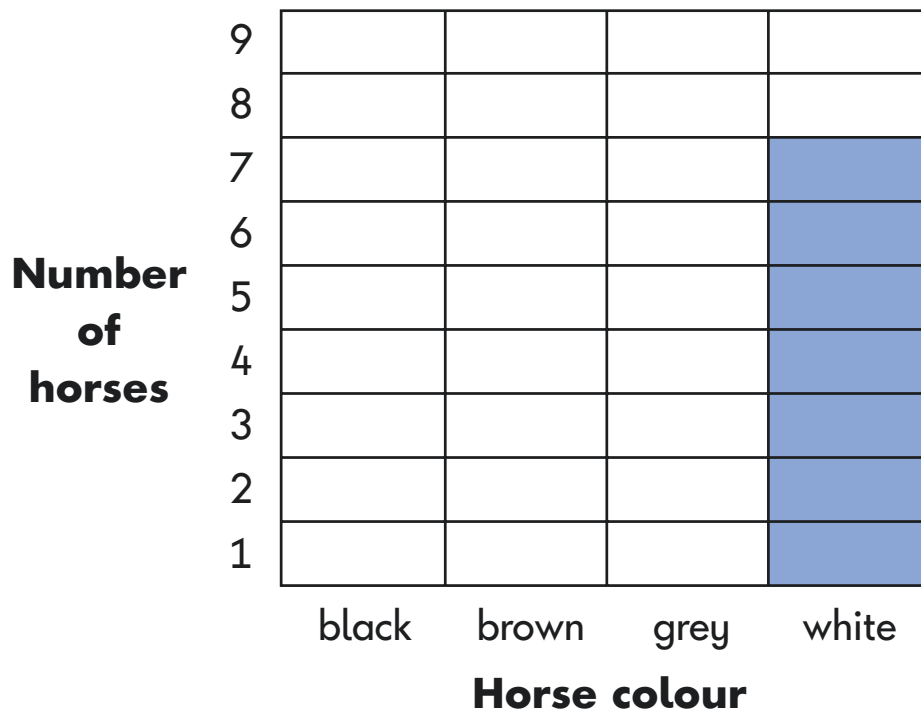
**7**

This table shows the different colours of horses on a farm.

Horse colour	Number of horses
black	2
brown	0
grey	4
white	7

Use the table to complete the graph below.

One is done for you.



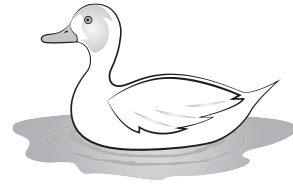
1 mark

8

There are **16** ducks on the pond.

**5** ducks fly away.

How many ducks stay on the pond?



--

ducks



1 mark

9

Write the missing numbers in this pattern.

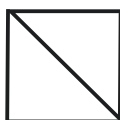
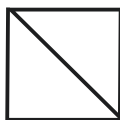
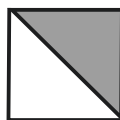
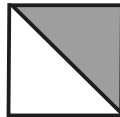
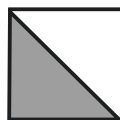
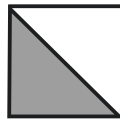
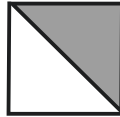
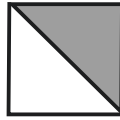
		71		73	74
--	--	----	--	----	----



1 mark

10 Here is a shape pattern.

Shade the **last two** boxes to complete the pattern.



1 mark

**11** Sam has **90** marbles.

He gives **50** marbles to Ben.

How many marbles does Sam have left?

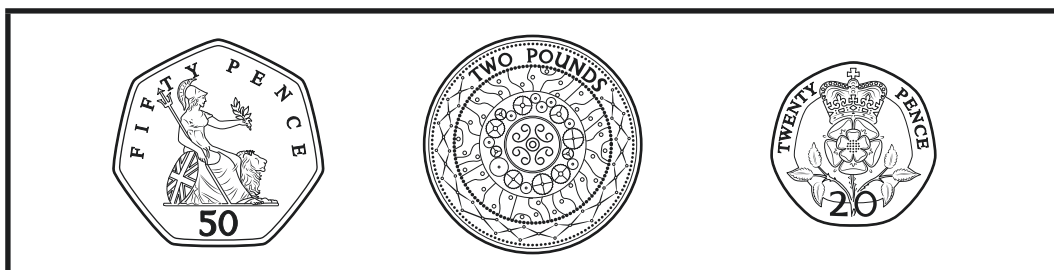
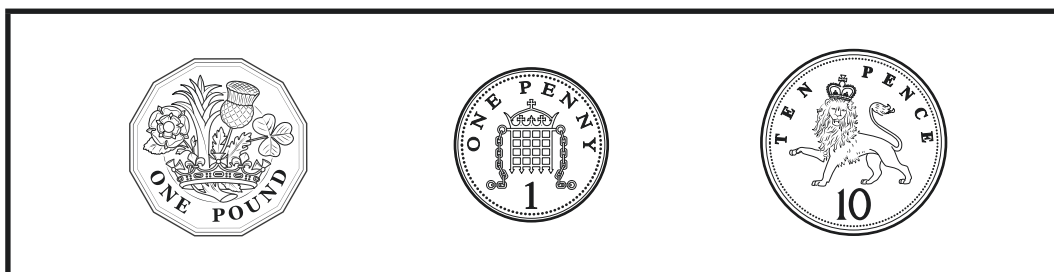
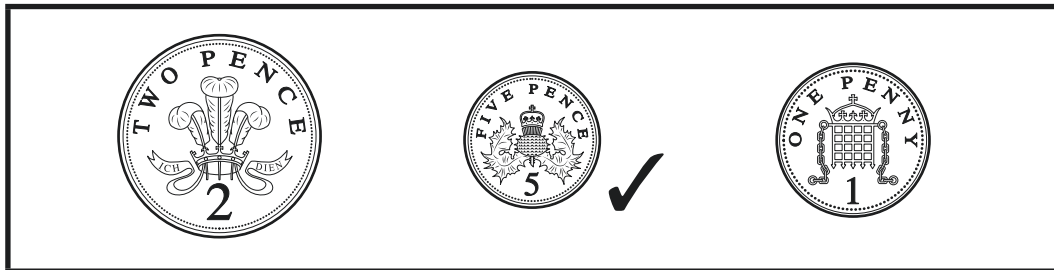


1 mark

12

In each box, tick the coin that has the **greatest value**.

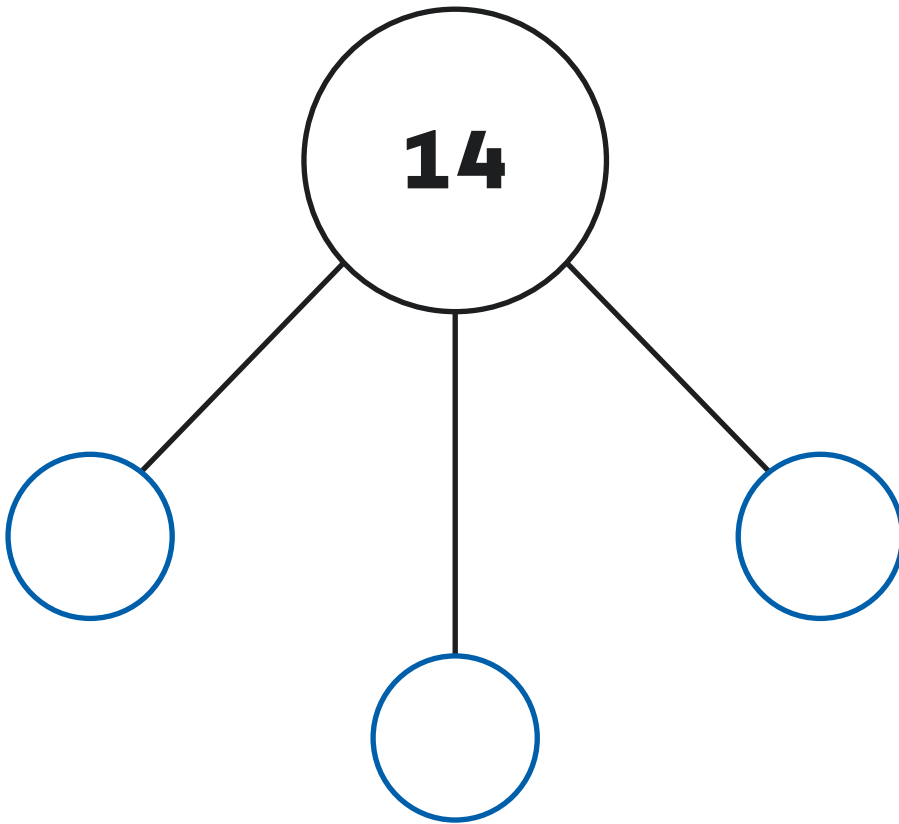
One is done for you.



1 mark

**13**

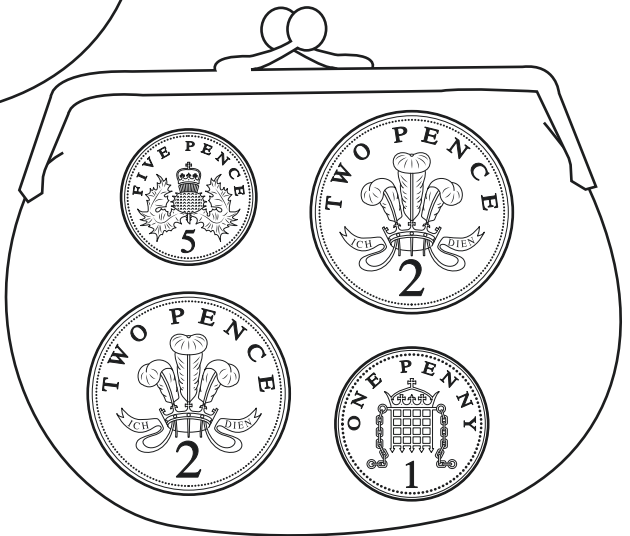
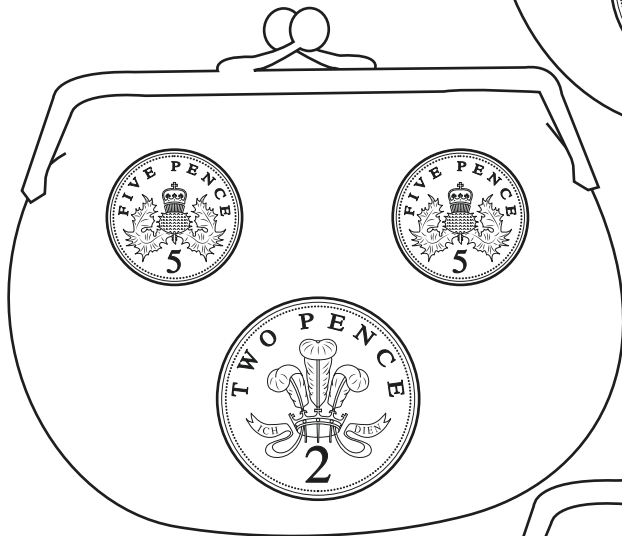
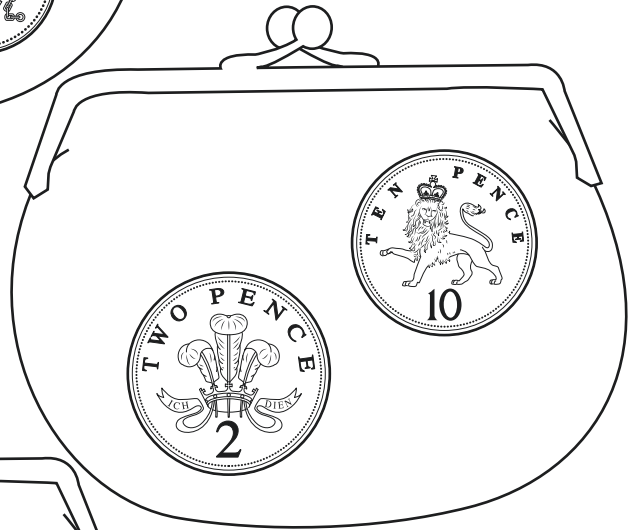
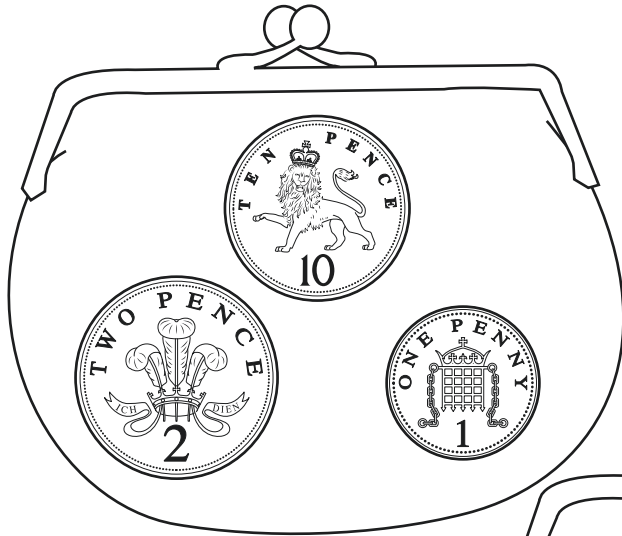
Write a number in each empty circle so that all three numbers total **14**



1 mark

14

Tick **two** purses with the **same** amount of money.

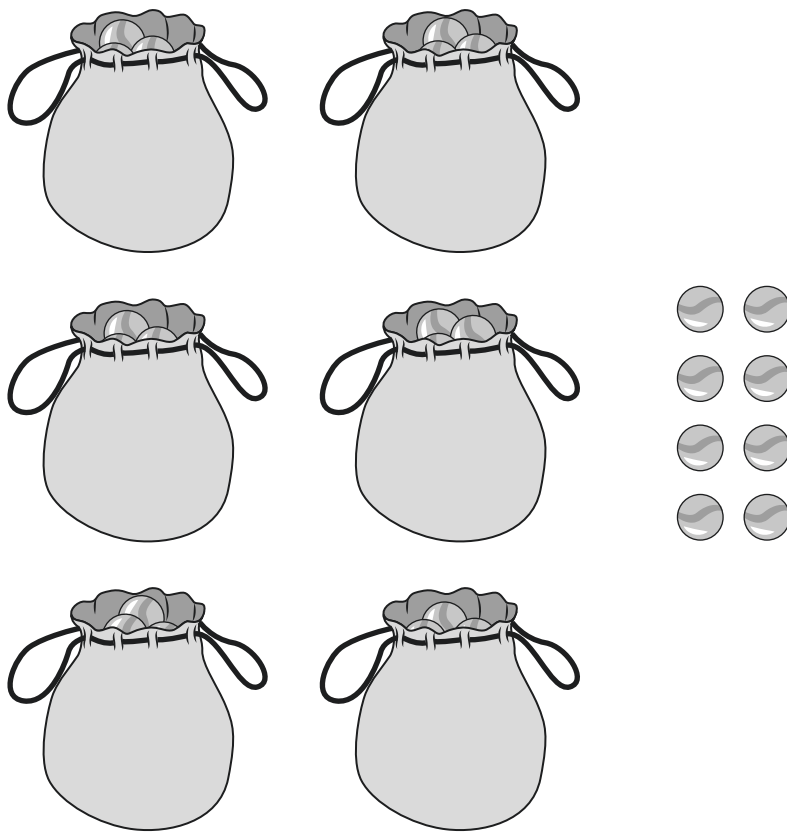


1 mark

15

Ajay has some marbles.

He puts **10** marbles into each bag. He has 8 left over.



How many marbles does Ajay have **altogether**?

marbles



1 mark



16 Complete the number sentence below.

$$5 \times \square = 5$$



1 mark

17 Ajay had **18** strawberries.

He picked some **more**.

Ajay now has **24** strawberries.

How many **more** strawberries did he pick?



strawberries



1 mark

**18** One calculation does **not** equal 17

Cross it out.

$$9 + 8$$

$$8 + 9$$

$$20 - 3$$

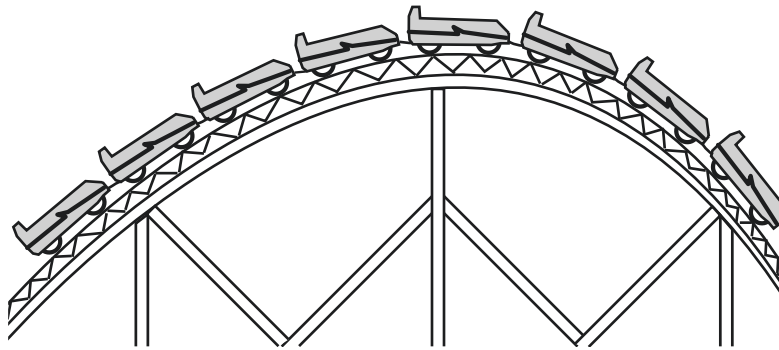
$$3 - 20$$



1 mark

19

A ride has **8** cars.



There are **5** seats in each car.

Complete the number sentence to show the **total** number of seats on the ride.

$$\square \times \square = \square \text{ seats}$$

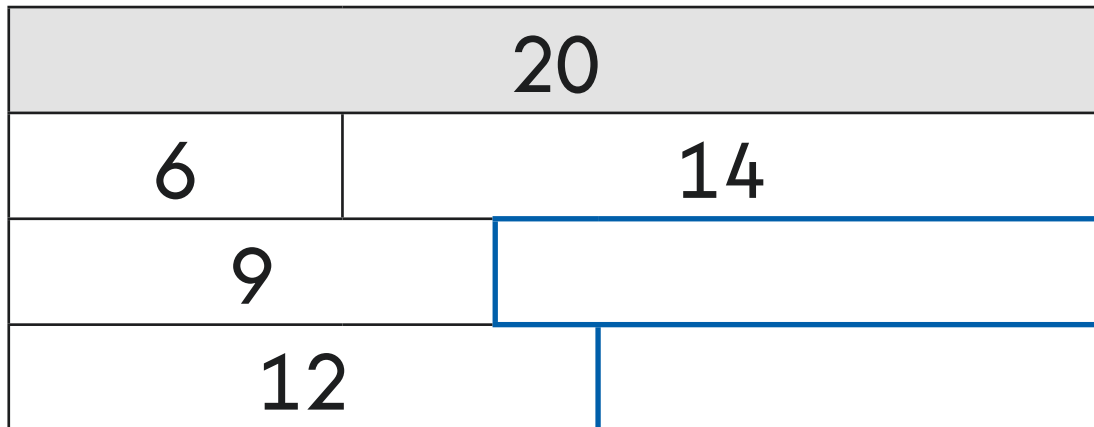
○  
1 mark

**20**

The diagram below shows number bonds that make **20**

Write the missing numbers to complete the diagram.

One is done for you.



1 mark

21

This number pattern increases by **10** each time.

7      17      27      37

Circle **all** the numbers below that will be in the pattern.

57

66

75

97



1 mark

22

Stickers are sold in packs of **5**

Kemi has **30** stickers altogether.

How many packs does Kemi have?

packs



1 mark

23

Amy has **45p**.



A badge costs **10p**.

What is the **total** number of badges that Amy can buy with 45p?

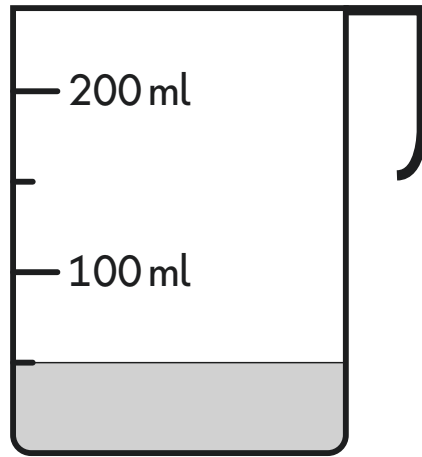
badges



1 mark

24

How much juice is in this measuring jug?



ml



1 mark

25

Tick **all** the calculations that total **100**

$$50 + 50$$

$$80 + 30$$

$$75 + 15$$

$$35 + 65$$

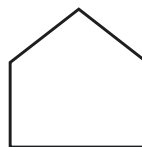
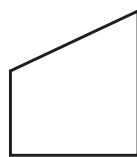


1 mark

26

Three of the shapes below have a line of symmetry.

Tick the **three** shapes.

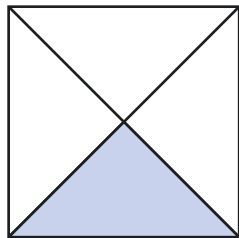
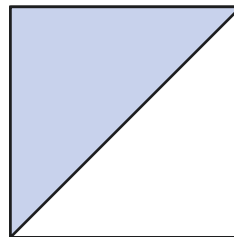
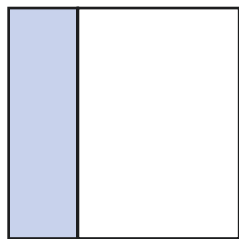
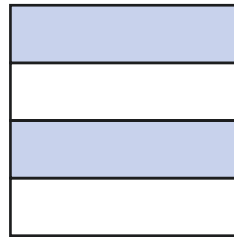
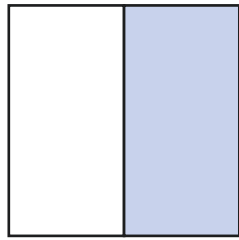


1 mark



27

Tick **all** the squares that have **half** shaded.



1 mark

28 Only **one** number sentence is correct.

Circle it.

$$\frac{1}{4} = \frac{1}{2}$$

$$\frac{2}{4} = \frac{1}{3}$$

$$\frac{3}{4} = \frac{1}{2}$$

$$\frac{2}{4} = \frac{1}{2}$$



1 mark

29

Complete the number sentence.

One is done for you.

$$\frac{1}{4} \text{ of } 8 = \boxed{2}$$

$$\frac{3}{4} \text{ of } 8 = \boxed{\phantom{00}}$$



1 mark

30

Sita only puts **5p** coins in a bag.

There is a **total of £1** in the bag.

How many 5p coins are in the bag?



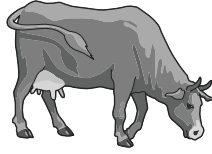
coins



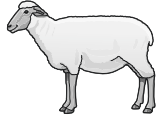
1 mark

31 There are **30** animals on a farm.

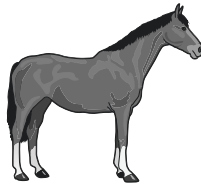
$\frac{1}{2}$  of the animals are cows.



9 are sheep.



The rest are horses.



How many of the animals are horses?

Show  
your  
working

horses




2 marks

32

Here is a balance.



The mass of the  is 15 kg.

What is the mass of **one**  ?

  
kg

1 mark

33

Sita buys a drink that costs 65p.

She pays with **four** 20p coins.

How much **change** does Sita get?



Show  
your  
working

2 marks

End of test

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2024 key stage 1 mathematics

Paper 2: reasoning

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